

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0076686; AI 19002; PER20070001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Village of Natchez
Natchez Sewerage Treatment Plant
Post Office Box 229
Natchez, Louisiana 71456

- II. **PREPARED BY:** Todd Franklin

DATE PREPARED: August 21, 2007

- III. **PERMIT ACTION:** reissue LPDES permit LA0076686, AI 19002; PER20070001

LPDES application received: July 23, 2007

Previous LPDES permit effective: February 1, 2003
Previous LPDES permit expires: January 31, 2008
EPA has not retained enforcement authority.

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Village of Natchez.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located about ¼ mile off LA Hwy. 1 on Main Street in Natchez, Natchitoches Parish.

- D. The treatment facility consists of a three-cell oxidation pond followed by an overland flow system. Disinfection is by chlorination.

- E. **Outfall 001A & B***

Discharge Location: Latitude 31° 40' 11" North
Longitude 93° 2' 48" West

Description: treated sanitary wastewater and treated sanitary wastewater
commingled with stormwater runoff

Design Capacity: 0.35 MGD

Type of Flow Measurement that the facility is currently using:

Continuous Recorder / Totalizer

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* Outfall 001 is used for both sanitary wastewater during normal conditions and will be called 001A and treated sanitary wastewater commingled with stormwater runoff during rain events and will be called 001B.

V.

RECEIVING WATERS:

The discharge is into Bayou Natchez in Subsegment 101101 of the Red River Basin. This Subsegment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Subsegment 101101 of the Red River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Full	Not Supported	N/A	Not Supported	N/A	Full

^{1/}The designated uses and degree of support for Subsegment 101101 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI.

ENDANGERED SPECIES:

The receiving waterbody, Subsegment 101101 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006, from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII.

HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII.

PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for

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a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX.**PROPOSED PERMIT LIMITS:**

Subsegment 101101, Cane River-above Natchitoches to Red River, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

PRE-APPLICATION TREATMENT

The permittee utilizes an overland flow method for wastewater treatment. Overland flow systems are a method of land application and wastewater reuse capable of meeting advanced treatment levels. In this type of system, wastewater is applied at the top of a gently sloping terrain and allowed to flow over the surface of the ground to the bottom where it is collected, disinfected, and discharged. However, municipal wastewater often contains rags, paper, hair and other large articles that can bind and clog orifices and valves in surface and sprinkler distribution systems. Therefore, pre-application treatment is required to prevent operating problems with the distribution system and nuisance conditions such as odor during storage.

It is the intent of this Office to protect in-stream conditions during times of critical or low flow. As such, LAC 2311.A.1, requires permits for the discharge of pollutants from any point source into waters of the state. Since the application field is not included as waters of the state, effluent limitations and monitoring requirements will not be required for discharge to the application field. However, since the Village utilizes an aerated pond system for pretreatment, every attempt should be made to meet limitations equivalent to secondary treatment as established by LAC 33:IX.5905.A and B and LAC 33:IX.711.D.2.

PROPOSED PERMIT LIMITS - OUTFALL 001A**Post Application Effluent Limitations**

Overland flow systems provide advanced tertiary treatment to secondary treated wastewater. The wastewater is treated in the saturated top layer of the soil and by bacteria and algae attached to the vegetation. Wastewater is treated as it passes through the soil by filtration, adsorption, ion exchange, precipitation, microbial action, and plant uptake. In addition, microbes attached to the vegetation to extract nutrients. Overland flow systems provide significant reductions in BOD and TSS. Nitrogen is removed through nitrification/denitrification and crop uptake. Phosphorus removal is limited due to

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the minimum amount of percolation, but is held in the soil and serves to enrich the soil. Some wastewater is lost through evaporation and transpiration. Very little wastewater is passed onto the groundwater, due to the use of impermeable soils. The remaining wastewater is collected at the bottom of the slope, disinfected and discharged into nearby waters of the state. (*Process Design Manual for Land Treatment of Municipal Wastewater*, USEPA, US Army Corps of Engineers, and US Department of Agriculture, 1977)

REPORTING REQUIREMENTS FOR OUTFALLS 001A / 001B

Since the Natchez Sewerage Treatment Plant contains only one outfall that will be utilized for both normal conditions and inclement weather conditions, DMRs should be reported as follows:

Outfall 001A – two samples per month should be taken and the DMR should reflect a discharge with the required parameters and effluent limitations on Part I, page 2 of 3 of the permit.

Outfall 001B – one sample per day should be taken on days with individual rain events above 2.68" and where the facility could not suspend a discharge onto the application field during that rainfall event. The DMR should reflect a discharge with the required parameters and effluent limitations on Part I, page 3 of 3 of the permit.

Final Effluent Limits:**OUTFALL 001A**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	88	30 mg/l	45 mg/l	Limitations are set in accordance with the <i>Wasteload Allocation (WLA)</i> for <i>Natchitoches and Natchez</i> , reviewed and approved by EPA in a letter dated March 27, 1985.
TSS	88	30 mg/l	45 mg/l	
Ammonia-Nitrogen	44	15 mg/l	30 mg/l	
Dissolved Oxygen*	N/A	5 mg/l	N/A	

*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body that has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order

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to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

STORMWATER/RAINFALL RUNOFF CONDITIONS:

It is the goal of this Office to protect water quality uses and uphold water quality standards, especially during times of critical or low flow. Periods of rainfall runoff may not be considered critical conditions. However, during periods of rainfall all of the pretreatment wastewater may not infiltrate, may runoff, may pond in low areas, may erode, and may be washed to surface waters without adequate advanced treatment. On the other hand, the effluent BOD₅ and TSS concentrations during rainfall events have been similar to dry weather conditions. However, the mass discharge of these constituents may increase proportionally to both the intensity and duration of the rainfall event. In other words, heavy rainfall events can theoretically cause a violation of mass discharge limits, even though the monthly average limit may not actually have been violated.

Stormwater discharges for the Natchez Sewerage Treatment Plant are highly variable in terms of flow and the relationship between discharges and water quality in general can be complex, not lending itself to the existing methodologies for deriving numeric water quality-based effluent limitations. Considering design capacity of the facility and the area of the application field, a measured rainfall event was derived that would approach the facility's design capacity without exceeding the design capacity. For the Natchez Sewerage Treatment Plant, **inclement weather** shall be defined by the following equation:

Application field	=	4.8 acres
1 acre	=	43,560 ft ²
Area	=	4.8 acres X 43,560 ft ² /acre = 209,088 ft ²
Facility Flow	=	0.35 MGD (350,000 GPD)
Volume on field	=	350,000 GPD x 1 ft ³ / 7.48 gallons = 46,791 ft ³ /day
	=	46,791 ft ³ /day x 1/209,088 ft ² = 0.2238 ft /day
Inches of rainfall	=	0.2238 ft/day x 12"/ft = 2.68"/day

Given the area of the application field, it was determined that a rainfall event of 2.68" would equal approximately the volume of wastewater capable to being treated, or design capacity, of the facility. Therefore, **any rainfall event of at least 2.68", without at least a one hour subsidence, shall be considered inclement weather.** After 2.68" of rainfall, the permittee will suspend discharges to the application field when practical. (See Part II, Section D.2.c, Management Requirements for practicality of suspending discharge to the application field, rainfall measurement, and stormwater/rainfall runoff sampling.) Once the rain has stopped, the facility should not resume discharging to the application field for one (1) hour following the episode of inclement weather. **However, if the facility must discharge to the application field during periods of inclement weather, the permittee will be required to meet the discharge limitations for Outfall 001B.** Parameters to be analyzed are outlined in the following tables.

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Final Effluents Limits:**OUTFALL 001B**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	N/A	30 mg/l	45 mg/l	Limitations are set in accordance with the <i>Wasteload Allocation (WLA)</i> for <i>Naichitoches and Natchez</i> , reviewed and approved by EPA in a letter dated March 27, 1985.
TSS	N/A	30 mg/l	45 mg/l	
Ammonia-Nitrogen	N/A	15 mg/l	30 mg/l	
Dissolved Oxygen*	N/A	5 mg/l	N/A	

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0076686: Effective: February 1, 2003

Expired: January 31, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<u>Outfall 001A</u>				
Flow	Report	Report	Continuous	Recorder
CBOD ₅	88 lb/day /30 mg/l	45 mg/l	2/month	Grab
TSS	88 lb/day/30 mg/l	45 mg/l	2/month	Grab
NH ₃ -N	15 mg/l	30 mg/l	2/month	Grab
DO	5 mg/l	---	2/month	Grab
Fecal Coliform				
Colonies/100 ml	200	400	2/month	Grab
pH	Range (6.0 su – 9.0 su)		2/month	Grab
<u>Outfall 001B</u>				
Flow	Report	Report	1/quarter	Estimate
CBOD ₅	Report (mg/l)	Report (mg/l)	1/quarter	Grab
TSS	Report (mg/l)	Report (mg/l)	1/quarter	Grab
NH ₃ -N	Report (mg/l)	Report (mg/l)	1/quarter	Grab
DO	Report (mg/l)	Report (mg/l)	1/quarter	Grab
Fecal Coliform				
Colonies/100 ml	Report	Report	1/quarter	Grab
pH	Report	Report	1/quarter	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates that no recent inspections have been performed for this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement action administered against this facility:

LDEQ Issuance:

Consolidated Compliance Order & Notice of Potential Penalty
Enforcement Tracking No. WE-CN-04-0440
Date Issued – May 29, 2007

Findings of Fact:

1. The Respondent owns and/or operates a publicly owned treatment works (POTW) serving the residents of the Village of Natchez which is located at 221 Main Street in Natchez, Natchitoches Parish, Louisiana. The Respondent was issued Louisiana Water Discharge Permit System (LWDPS) permit WP1978 on or about December 21, 1987, which expired on or about December 20, 1992. The Respondent was issued National Pollutant Discharge Elimination System (NPDES) permit LA0076686 on or about November 3, 1988, which

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expired on or about November 2, 1993. The Respondent submitted a LWDPS permit renewal application to the Department on or about June 19, 1995, subsequent to the expiration of the Respondent's LWDPS and NPDES permits.

In accordance with the Department's assumption of the NPDES program on or about August 27, 1996, NPDES permits became Louisiana Pollutant Discharge Elimination System (LPDES) permits. The Respondent submitted an updated, LPDES permit application to the Department on or about July 12, 2000. The Respondent was issued LPDES permit LA0076686 on or about January 20, 2003, which became effective on or about February 1, 2003, and which shall expire on January 31, 2008. Under the terms and conditions of LPDES permit LA0076686, the Respondent is authorized to discharge treated sanitary wastewater into Bayou Natchez, thence into the Old River, thence into the Red River, all waters of the state.

2. A file review conducted by the Department on or about May 9, 2007, revealed the Respondent failed to submit an application for the renewal of its LWDPS permit 180 days prior to the expiration date of December 20, 1992. The Respondent submitted an LWDPS permit renewal application to the Department on or about June 19, 1995, and an updated LPDES application to the Department on or about July 12, 2000. The Respondent's failure to submit a permit application in a timely manner is in violation of LWDPS permit WP1978 (Part IV, Sections A.1, and D.8.a) La. R.S. 30:2076 (A) (3), LAC 33:IX.309.A, LAC 33:IX.311.A, and LAC 33:IX.501.A.
3. A file review conducted by the Department on or about May 9, 2007, revealed that the Respondent was discharging inadequately treated sanitary wastewater without a permit. Specifically, the Respondent continued to operate and discharge after the expiration of its LWDPS and NPDES permits. The following was reported by the Respondent on Discharge Monitoring Reports (DMRs) after expiration of its permits:

Date	Parameter	Permit Limit	Reported Value
October through December 2001	Fecal Coliform (Daily Avg.)	200 col./100 ml	1,450 col./100 ml
	Fecal Coliform (Daily Max.)	400 col./100 ml	1,450 col./100 ml
January through March 2002	BOD ₅ (Daily Avg.)	30 mg/L	40.6 mg/L
	TSS (Daily Avg.)	30 mg/L	30.3 mg/L
	Fecal Coliform (Daily Avg.)	200 col./100 ml	2,236.7 col./100 ml
	Fecal Coliform (Daily Max.)	400 col./100 ml	2,236.7 col./100 ml

Each discharge to waters of the state by the Respondent after the expiration of its LWDPS and NPDES permits and prior to February 1, 2003, are unauthorized discharges in violation of La. R.S. 30:2075, La. R.S. 30:2076 (A) (1) (a), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.501.D, and LAC 33:IX.2311.A.1.

4. An inspection conducted by the Department on or about November 18, 2003, and a subsequent file review conducted by the Department on or about May 9, 2007, revealed the following permit excursions, as reported by the Respondent on Discharge Monitoring Reports (DMRs):

Date	Parameter	Permit Limit	Reported Value
January through March 2004	TSS (Monthly Avg.)	30 mg/L	38 mg/L
	Fecal Coliform (Monthly Avg.)	200 col./100 ml	1,675 col./100 ml
	Fecal Coliform (Weekly Avg.)	400 col./100 ml	1,675 col./100 ml
April through June 2004	TSS (Monthly Avg.)	30 mg/L	32.93 mg/L

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Each excursion of the effluent limitations is in violation of LPDES permit LA0076686 (Part I, Page 2 of 4, and Part III, Section A.2), La. R.S. 30:2076 (A) (1), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.501.D, and LAC 33:IX.2701.A. Also, samples collected during the inspection conducted on or about November 18, 2003, revealed a TSS value of 702 mg/L. The monthly average and weekly average permit limitations for TSS are 30 mg/L and 45 mg/L, respectively.

5. An inspection conducted by the Department on or about November 18, 2003, revealed deficiencies in operations and maintenance. Specifically, there was debris in the chlorine contact chamber which needed to be removed, no disinfection was being provided for treatment, and the treatment plant's electronic control panel was inoperable. The Respondent's failure to properly operate and maintain its treatment plant is in violation of LPDES permit LA0076686 (Part III, Sections A.2, and B.3.a), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.2701.A, and LAC 33:IX.2701.E.
6. An inspection conducted by the Department on or about November 18, 2003, revealed the Respondent was not monitoring flow as required by LPDES permit LA0076686. Specifically, LPDES permit LA0076686 requires that flow be measured continuously. The Department's aforementioned inspection revealed the Respondent's flow meter was inoperable. The Respondent's failure to continuously monitor flow is in violation of LPDES permit LA0076686 (Part I, Page 2 of 4, and Part III, Sections A.2, B.3.a, and C.6.), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.2701.A, and LAC 33:IX.2701.E.
7. A file review conducted by the Department on or about May 9, 2007, revealed the Respondent failed to sample as required. Specifically, the Respondent indicated on its DMRs for the monitoring periods of February 2003 through June 2004 that sampling was conducted once per month instead of twice per month as required by LPDES permit LA0076686 for TSS and Fecal Coliform. Each failure by the Respondent to sample as required is in violation of LPDES permit LA0076686 (Part I, Page 2 of 4, and Part III, Section A.2), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, and LAC 33:IX.2701.A.
8. A file review conducted by the Department on or about May 9, 2007, revealed the Respondent failed to report as required. Specifically, the Respondent reported BOD₅ instead of CBOD₅ on its DMRs for the monitoring periods of February 2003 through June 2004, and also failed to indicate Ammonia-Nitrogen and Dissolved Oxygen on the aforementioned DMRs. On each quarterly DMR submitted for the monitoring periods of January through June 2004 the Respondent indicated that samples were taken once per thirty days. However, identical values were reported for the monthly and weekly averages for BOD₅, TSS, and Fecal Coliform. Finally, the Respondent failed to report flow on each quarterly DMR submitted for the monitoring periods of January through June 2004. Each failure by the Respondent to report as required is in violation of LPDES permit LA0076686 (Part I, Page 2 of 4, Part II, Section A.13, and Part III, Sections A.2 and D.4), La. R.S. 30:2076 (A) (1), La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.501.D, LAC 33:IX.2701.A, and LAC 33:IX.2701.L.4.
9. A file review conducted by the Department on or about May 9, 2007, revealed the Respondent failed to submit DMRs as required. Specifically, the Respondent failed to submit DMRs for the monitoring periods of February 2003 through December 2006 as required by LPDES permit LA0076686. The Respondent submitted quarterly DMRs instead of monthly DMRs on a quarterly basis for the monitoring periods of February 2003 through June 2004, and failed to submit any DMRs for the monitoring periods of July 2004

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through March 2007. Each failure by the Respondent to submit DMRs is in violation of LPDES permit LA0076686 (Part II, Section A.13, and Part III, Sections A.2 and D.4) La. R.S. 30:2076 (A) (3), LAC 33:IX.501.A, LAC 33:IX.2701.A, and LAC 33:IX.2701.L.4.a.

Order:

1. To immediately take any and all steps necessary to achieve and maintain compliance with permit limitations and conditions contained in LPDES permit LA0076686.
2. To submit to the Enforcement Division properly completed Discharge Monitoring Reports (DMRs) for the monitoring periods mentioned in Paragraphs 8 and 9 of the Findings of Fact.
3. To submit to the Enforcement Division a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with the Order Portion of the **COMPLIANCE ORDER**.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2005 through April 2007 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS, Monthly Avg.	001A	January 2005	30 mg/l	39.60 mg/l
Fecal Coliform, Monthly Avg.	001A	February 2005	200 cfu/100 ml	380 cfu/100 ml
TSS, Monthly Avg.	001A	June 2005	30 mg/l	37.20 mg/l
Fecal Coliform, Monthly Avg.	001A	June 2005	200 cfu/100 ml	970 cfu/100 ml
Fecal Coliform, Weekly Avg.	001A	June 2005	400 cfu/100 ml	970 cfu/100 ml
TSS, Monthly Avg.	001A	July 2005	30 mg/l	32.40 mg/l
CBOD ₅ , Monthly Avg.	001A	October 2005	30 mg/l	39.0 mg/l
TSS, Monthly Avg.	001A	October 2005	30 mg/l	81.00 mg/l
TSS, Weekly Avg.	001A	October 2005	45 mg/l	81.00 mg/l
Fecal Coliform, Monthly Avg.	001A	October 2005	200 cfu/100 ml	610 cfu/100 ml
Fecal Coliform, Weekly Avg.	001A	October 2005	400 cfu/100 ml	610 cfu/100 ml
CBOD ₅ , Monthly Avg.	001A	November 2005	30 mg/l	39.3 mg/l
TSS, Monthly Avg.	001A	November 2005	30 mg/l	82.60 mg/l
TSS, Weekly Avg.	001A	November 2005	45 mg/l	82.60 mg/l
Fecal Coliform, Monthly Avg.	001A	November 2005	200 cfu/100 ml	830 cfu/100 ml
Fecal Coliform, Weekly Avg.	001A	November 2005	400 cfu/100 ml	830 cfu/100 ml
TSS, Monthly Avg.	001A	December 2005	30 mg/l	149.15 mg/l
TSS, Weekly Avg.	001A	December 2005	45 mg/l	269.00 mg/l
TSS, Monthly Avg.	001A	May 2006	30 mg/l	44.20 mg/l
Fecal Coliform, Monthly Avg.	001A	May 2006	200 cfu/100 ml	750 cfu/100 ml
Fecal Coliform, Weekly Avg.	001A	May 2006	400 cfu/100 ml	750 cfu/100 ml
TSS, Monthly Avg.	001A	November 2006	30 mg/l	34.60 mg/l
TSS, Monthly Avg.	001A	March 2007	30 mg/l	104.20 mg/l
TSS, Weekly Avg.	001A	March 2007	45 mg/l	104.20 mg/l

*Please note that when a discharge occurred at the facility, it was measured 1/7 days, as opposed to a continuous record, which is required in the LPDES permit.

*Also, no loading values were reported on the DMRs.

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***Also, when sampling was performed, samples were only taken 1/month, as opposed to 2/month, which is required in the LPDES permit.**

XII. ADDITIONAL INFORMATION:

LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L CBOD₅ and 2 mg/L NH₃-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Subsegment 101101 contains the designated use for drinking water supply. The drinking water source listed in Subsegment 101101 is for Intake #32, the City of Natchitoches, which gets its drinking water from Sibley Lake, located upstream from the location of the outfall of the Natchez Sewerage Treatment Plant. Therefore, there will be no direct impact to this drinking water intake from the Natchez Sewerage Treatment Plant.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.35 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.35 \text{ MGD} \times 30 \text{ mg/l} = 88 \text{ lb/day}$$

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit for Outfall 001A are standard for facilities of flows between 0.10 and 0.50 MGD.

Outfall 001A (treated sanitary wastewater)

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Outfall 001B (Commingled treated sanitary wastewater and stormwater):

***Only applicable during periods of inclement weather and where the facility could not suspend discharge**

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	1/day	Grab
Total Suspended Solids	1/day	Grab

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Ammonia-Nitrogen	1/day	Grab
Dissolved Oxygen	1/day	Grab
Fecal Coliform Bacteria	1/day	Grab
pH	1/day	Grab

MANAGEMENT REQUIREMENTS

In accordance with LAC 33:IX.2701.E and LAC 33:IX.2707.K.3, the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Therefore, the permittee shall develop and implement a Management Requirement Plan which shall address (1) maintenance and operation of the facility and (2) maintenance and operations of the application field.

General and specific requirements of the plan will be designed to prevent or minimize potential for the release of pollutants from ancillary activities; including material storage areas, plant site runoff, in-plant transfer, process and material handling areas, loading and unloading operations, water treatment areas, and operation and maintenance of equipment to the waters of the State through site runoff, spillage or leaks, wastewater disposal, or drainage from raw material storage areas. Specific conditions of the plan will be designed to assure the facility provides optimal treatment with optimal efficiency, including: wastewater storage, buffer zones, disinfection, vegetation, distribution, and terrace slope maintenance.

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII**TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

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REFERENCES:

Louisiana Water Quality Management Plan, Vol. 8, "Wasteload Allocations and Discharger Inventory," Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory," Louisiana Department of Environmental Quality, 1998.

A Wasteload Allocation for the Natchitoches and Natchez Municipal Wastewater Treatment Facilities, Louisiana Department of Natural Resources, December, 1984 (approved by EPA in a letter dated March 27, 1985).

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Village of Natchez, Natchez Sewerage Treatment Plant, July 23, 2007.